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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,046

03/15/2004

Sudhansu S. Yadav

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09/26/2006

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EXAMINER

SOLD, JENA A

ART UNIT

PAPER NUMBER

3765

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/801,046	Applicant(s) YADAV ET AL.	
	Examiner Jena A. Sold	Art Unit 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/14/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 6/14/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the foreign patents referred to therein have not been considered.
2. Additionally, the information disclosure statement filed 6/14/2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language, Japanese patent JP200317165A2.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not correctly identify the state of residence of inventor Scott Nelson, listing the state as "State" on the declaration. The revised residence information may be provided on either an application data sheet or supplemental oath or declaration.

Specification

The disclosure is objected to because of the following informalities:

4. Page 2, line 16: The phrase "a need for" is repeated twice.

Page 3, line 7: Replace "and" with "an" in the sentence "One object of the present invention is to provide and improved safety garment."

Page 5, line 18: Replace "SPT" to "SPI" which applicant has said to mean "stitches per inch."

Page 6, line 17: Replace "tow" with "two" in phrase "more complex patterns... may require tow or more sheets of varying size."

Appropriate correction is required.

Claim Objections

5. Claims 2-3 and 6-7 are objected to because of the following informalities: The claims contain subject matter that was not disclosed or described in the specification. Specifically, claims 2, 3, 6, and 7 claim the invention as described in the specification wherein the garment includes a plurality of snap-fasteners to shape the garment into either a smock or jumpsuit. The specification, however, fails to mention snap-fasteners as part of the invention, nor does it, more broadly, disclose the employment of any type of mechanical fastener in order to construct said garment. Likewise, the drawings make no indication of or reference to snap-fasteners as part of the claimed invention. Thus,

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there is lack of antecedent basis for the snap-fastener limitations in claims 2, 3, 6, and 7.

6. Claim 11 is objected to because it appears a phrase is missing in part b) after "stitching the at least one," and should be changed to "stitching the at least one sheet of nonwoven material" for further clarification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmons et al. (U.S. 5188885) in view of Kuczynski (U.S. 5150660). With regard to claims 1 and 5, Timmons discloses a non-woven fabric laminate and a low particle emission, sterilizable garment for use in clean rooms and the like. The garment is fabricated from a spun-bonded/melt-blown/spun-bonded (SMS) fabric laminate with low emission characteristics (column 16, lines 12-14) and is disclosed as generally the same construction as the protective garments sold by Kimberly-Clark under the trademark KleenGuard® (column 16, lines 19-22). Specifically, said nonwoven garment necessarily has at least one cut edge and is fabricated with monofilament nylon thread (column 16, lines 24-26), thus anticipating present applicant's "a plurality of hems stitched into the material and defining a garment" of claim 1, where hems are

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interpreted as seams stitched to form said garment, and "a plurality of stitches...to define a garment" of claim 5. Additionally, the fabric is double rolled around the elastic at the cuffs of the arms and legs to minimize particulate emission (column 16, lines 26-28), anticipating a garment wherein the at least one cut edge is double folded under. As said edge forms the hem for the sleeves and pant legs and must be secured around the elastic, the double-folded edge is considered to be "hemmed into place."

8. Regarding claim 1, Timmons fails to disclose said non-woven garment wherein the fabric is a spun-bonded/melt-blown/melt-blown/spun-bonded (SMMS) fabric laminate rather than a spun-bonded/melt-blown/spun-bonded (SMS) fabric laminate and wherein the hems are characterized by between 10 and 12 stitches per inch. SMMS and SMS fabrics are used interchangeably for protective garments and clean room garments, such as the low particle emission garment disclosed by Timmons and the safety garment disclosed in the present application. SMMS and SMS fabrics are fabricated from the same materials, with SMMS garments having an extra melt-blown layer, and thus have the same properties and end uses, and offer the same advantages. Additionally, applicant discloses "The safety garment 10 is preferably made from spun-bond/melt-blown/melt-blown/spun-bond (SMMS) material, spun-bond/melt-blown/spun-bond (SMS) material, or the like" (page 5, paragraph 2), recognizing the interchangeability of the two materials and the merit of either material for applicant's invention. Thus, it would have been obvious to one having ordinary skill in the art to replace said SMS fabric with SMMS fabric because said fabrics are used

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interchangeably in the construction of non-woven products and are recognized as interchangeable in the apparel arts.

9. Kuczynski teaches a fabric material, partially comprising an outer layer made from non-woven spunbonded olefin. Kuczynski additionally teaches that when sewing stitches are too close together on the non-woven material, the succession of punched holes weakens the fabric. Kuczynski also teaches, however, that seams of apparel constructed from said material are strengthened when the outer non-woven layer is attached to the inner liner by the use of at least eleven stitches per inch, within the range of the present application's 10-12 stitches per inch (column 2, lines 8-14). In view of Kuczynski's teachings regarding an optimal stitches per inch for use with a non-woven, spunbonded fabric, it would be obvious to a person having ordinary skill in the art to construct the garment of Timmons – both the seams and hems - with 10-12 stitches per inch, namely eleven stitches per inch, because Timmons' garment, in order for reduced particulate emissions (column 1, lines 63-66), requires the greatest number of stitches possible, to provide durable and secure seams, without compromising and weakening the fabric, as taught by Kuczynski to be eleven stitches per inch.

10. With regard to claim 9, that Timmons' garment was fabricated with monofilament nylon thread (column 16, lines 24-26) inherently means that said garment was constructed out of more than one sheet of non-woven material, as separate pieces were stitched together by said nylon thread to form the garment.

11. Regarding claim 10, Timmons discloses said garment wherein the fabric is double rolled around the elastic at the cuffs of the arms and the legs (column 16, lines

26-28), anticipating present applicant's hems folded twice to encapsulate the at least one cut edge.

12. The method of claim 11 is inherent in the structure of Timmons' low particle emission garment. Said garment, constructed of SMS non-woven material (column 16, lines 12-14), was necessarily cut into a safety garment pattern, and was fabricated with monofilament nylon thread (column 16, lines 24-26) and, therefore, stitched to form said garment. Additionally, as discussed in the preceding paragraph, the hems on both the sleeves and pant legs were double rolled around elastic, thus preventing the exposure of any cut edges. In view of the teachings of Kuczynski, as discussed in paragraph 3 above, it would have been obvious to one of ordinary skill in the art to construct the seams and hems of said garment with 10-12 stitches per inch because Kuczynski teaches eleven stitches per inch is the optimal number of stitches per inch to provide a secure seam construction without weakening the fabric.

13. Claims 3, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmons et al. (U.S. 5188885) in view of Kuczynski (U.S. 5150660) and in further view of Welch et al. (U.S. 6047413).

14. With regard to claims 3 and 7, Timmons, in view of Kuczynski, discloses the invention substantially as claimed, including a garment shaped to form a jumpsuit and including a zipper fastener, as visible in Figure 7. Timmons fails to disclose, however, said garment including a plurality of snap fasteners. Welch teaches a nonwoven chemical protection garment 20, as visible in Figure 1 (column 6, line 55) with closure

means, where said closure means may be any suitable closure mechanism including snap fasteners (column 7, lines 5-8). Additionally, it is well known in the apparel arts that various types of fastening mechanisms are functionally equivalent, including zippers and snap fasteners, and may be used interchangeably depending upon the desired aesthetic effect. Further, the specification does not give an indication of why a snap fastener would be desirable over another fastener type, specifically a zipper fastener. Thus, it would be obvious to one with ordinary skill in the art to replace the zipper fastening mechanism of Timmons with the snap fastener of Welchel because said fasteners are equivalent and interchangeable securing means in the apparel arts and a snap fastener is easier and more cost-effective to apply to a fabric intended to be disposable, such as that of Timmons (column 1, lines 10-11).

15. Regarding claims 4 and 8, Timmons, in view of Kuczynski, discloses the invention substantially as claimed and as previously described, further including an elastic band disposed under a hem (column 16, lines 26-28). Timmons fails to disclose, however said garment wherein the garment is shaped to form a shoe covering. Welchel teaches said nonwoven chemical protection garment 20 wherein said garment may also include left and right ankle elastic portions 36, 38 (column 6, lines 60-61) and left and right foot or shoe covering portions 44, 46 (column 6, lines 65-67). Additionally, it is common for protective garments, clean room garments, and the like to include foot-covering portions either separately or integrally. Thus, it would be obvious to one with ordinary skill in the art to apply the foot-covering portions of Welchel's garment to Timmons low particle emission garment, because foot covering portions further protect

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the clean room environment from the shedding of contaminated particles off a person's shoes.

11. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmons et al. (U.S. 5188885) in view of Kuczynski (U.S. 5150660) and in further view of Ribble et al. (U.S. 6435116). Timmons, in view of Kuczynski, discloses the invention substantially as claimed and as previously discussed, including a garment, fabricated from nonwoven laminate material and shaped to form a surgical gown (column 20, lines 54-56), equivalent to present applicant's smock, defined as a loose, coatlike outer garment, often worn to protect the clothing while working. Timmons fails to disclose, however, said garment including a plurality of snap fasteners, although Timmons does disclose that the garments are "in most respects the same as the protective garments sold by Kimberly-Clark under the trademark Kleen-Guard®," often smock-type garments with snap fasteners. Ribble teaches a process for manufacturing garments with raglan sleeves, wherein said garments are fabricated from nonwoven material (column 7, lines 63-65), specifically, in a desired embodiment, SMS material (column 8, lines 34-37). The term "garment" as defined by Ribble includes shirts, tee-shirts, wraps, robes, gowns, jackets, coats, or any type of upper body covering having variable lengths of the garment itself (column 5, lines 62-65). Additionally, Ribble teaches said garment comprising a slit 57 on the front of the garment, with two edges 58 and 59 (column 7, lines 6-11) wherein various fastening mechanisms may be employed, including snap fasteners 95 (column 13, lines 45-51), as visible in Figure 5.

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Thus, it would have been obvious to one of ordinary skill in the art to construct the nonwoven, disposable gown of Timmons with a plurality of snap fasteners, in view of Ribble's teachings, because snap fasteners allow the gown to be put on and taken off quickly and easily.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is cited on form 892 enclosed herewith.

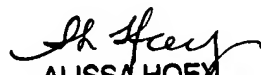
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jena A. Sold whose telephone number is (571) 272-8610. The examiner can normally be reached on Mon. - Fri. 8:30 A.M. to 4:30 P.M.:

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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